This month we will begin supplying the Altair Software Library programs to you on 8 1/2" x 11" sheets so they can conveniently be kept in a three-ring binder. Pages 1-4, included in this issue, comprise all of the programs accepted into the library thus far. Hereafter, add-on pages will be inserted in every issue of Computer Notes, listing the programs from the previous issue.

The fees for the programs are also listed. These fees are charged only so that we can cover the cost of printing and mailing the programs.

ALTAIR SOFTWARE LIBRARY UPDATE

Software Contest:

Members will be encouraged to submit programs for the *Altair Library*. These programs will be one of two categories: A. Subroutines, and B. Major Programs. All programs will be screened and tested by MITS.

Once a program has been found to be acceptable, it will be included in the *Altair* library and a description of the program will be printed in the User's Club newsletter. The author of the program will be entitled to a free printout of any two programs from the *Altair* library. (value up to $10.00)

There will be prizes awarded to the authors of the best programs. The prize for the best "major program" (announced in each newsletter) will be **$50.00 credit** toward the purchase of an *Altair* or *Altair* options. Second prize will be **$25.00 credit** and third place will be **$15.00 credit.** The author of the best "subroutine" will receive **$25.00 credit.** Second prize for a "subroutine" will be **$15.00 credit.**

A grand prize of $1000.00 credit will be awarded each year to the author of the overall best "major program." A prize of **$250.00 credit** will be awarded to the author of the best "subroutine."

MITS employees and their families will be encouraged to be members of the *Altair User's Club*, however, they will not be eligible for prizes. Contest void where prohibited by law.

In order that programs can be reproduced for distribution to other Altair owners, they should be typewritten using a ribbon that produces fairly dark type. It is desirable that assembly language and machine language programs be submitted on official Coding Forms or copies of such forms (if you think you have a better format, use it). Coding Forms are available from MITS at $2.00 per 50 to cover printing, postage and handling. (A sample form is enclosed.)

All entries should be on 8 1/2" x 11" white paper. Teletype printouts and Xerox copies are not acceptable.

-- $2.00 --

#422751
Author: Robert Rydel
Length: 25 bytes, first program
32 bytes, second program
Two pseudorandom number generators: They use "the multiplicative congruential method for producing pseudorandom numbers."
First program: produces 8-bit random numbers that repeat every 64 numbers.
Second program: produces 16-bit random numbers that repeat every 2^{14} random numbers.

#429751
Author: Martin C. Beattie, M.D.
Length: 102 bytes
Game program that plays the following game:
There are 15 chips. Each player takes 1,2 or 3 and the person to take the last one loses. The numbers 3 and 15 can be set as desired. Either player or computer goes first

#516753
Author: Harold S. Corbin
Length: 43 bytes
A debugging routine that when called saves the SP, top entry of stack, A, B, C, D, E, H, L and all flags except carry in core so they can be examined. Another entry port returns to the program.

#519751
Author: Dr. Oscar Goldman
Length: 48 bytes
Forms an 8-bit "maximal length shift register sequence" which "consists of the 2^8 distinct words ... arranged according to the following rules: The first word is 000 and each word is constructed from the previous one by first shifting left one place and then filling the vacated right-most spot with a 0 or a 1."

-- $2.00 --

#519753
Author: Martin C. Beattie, M.D.
Length: 111 bytes
Game program that plays the game of NIM:
Arrange any number of chips in any number of rows. Each player may remove any number of chips from any one row. The person who takes the last chip wins.
Program Limits: Up to 10 rows of 256 chips each. Either player or computer goes first.

#527751
Author: Randall K. Webb
Length: 40 bytes, first program
19 bytes, second program
26 bytes, third program
First program: estimate of the standard deviation of a list of positive numbers.
Second program: approximation of binary logarithm
Third program: bit reversal of a word.

#62751
Author: Roger L. Smith
Length: 43 bytes
This program plays music through an amplifier connected with a capacitor to an output port. Include 96 byte sample song.

#63751
Author: Ronald B. Keele
Length: 7 bytes
Memory clear.

#616751
Author: L. M. Eastburn
Length: 250 bytes
Sort program using bubble sort. Allows specification of data size and sort field.

#630751
Author: Jim Babcock
Length: BASIC, about 250 lines
Plays famous Las Vegas Card game.

-- $2.00 --

#711751
Author: L. M. Eastburn
Length: 180 bytes
Program to relocate other programs. Modified instruction operands when appropriate.

#714751
Author: Donald Tork
Length: 33 bytes
Loads data from an ASCII device into memory.

#717751
Author: Samuel Cook
Length: 22 bytes
The interrupt light on the front panel is turned on and off in a loop that gets smaller and smaller, starting at 1.8 seconds.

#717752 & #717753 ($2.00 each)
Author: Dr. George Haller
Length: 30 bytes each
One program (#717752) does a descending sort and the other (#717753) does an ascending sort. Both use a bubble sort. The lists to be sorted consist of single bytes, all of which are used as the sort field.

#721751
Author: Gary Tack
Length: 240 bytes
Plays tic-tac-toe. Uses the switches and lights.

#721752 (formerly misprinted as #521751)
Author: Dennis Bahr
Length: 25 bytes
RAM memory test program. Tests all locations between a lower and upper bound with all possible values.

#721753
Author: Matthew Smith
Length: 44 bytes
FLASH displays patterns in the lights. Good demonstration program.

#722751
Author: Roger Gulbranson
Length: 35-80 bytes depending on how much data is used.
Generates 16-bit random numbers using generalized feedback shift register algorithm.

-- $2.00 --

#724751
Author: Billy Wood
Length: 40 bytes
RAM memory diagnostic. Goes through memory testing locations with all bits on, and one off and vice versa.

#725751 (formerly misprinted as #722751)
Author: Herb Archer
Length: 35 bytes
RAM test program. Two different bit patterns are stored in each memory cell and checked for accuracy.

#725752
Author: Daniel Lomax
Length: 31 bytes
Program that finds out where it is in memory and then relocates itself to the page in the switch register.

#728752
Author: J. R. Scott
Length: 36 bytes
Translates some Bandot character codes to ASCII equivalent.

#730751
Author: John Klein
Length: About 200 lines of BASIC
Plays blackjack. Full instructions given with the program.

#84751
Author: Nilton G. Gimenes
Length: 15 bytes for each routine
Octal/ASCII -- ASCII/octal conversion routines for octal digits/characters stored in six sequential memory locations.

#84752
Author: Nilton G. Gimenes
Length: 28 bytes
Translates six octal digits in consecutive locations in memory to a double byte value in [D,E].

#84753
Author: Nilton G. Gimenes
Length: 33 bytes
Converts a 2-byte unsigned number into 6 individual octal digits in consecutive memory locations.

-- $2.00 --

#88751
Author: Charlie Shields
Length: 22 bytes
Outputs 1's to an I/O port a selected percentage of the time. Outputs 0's the rest of the time.

#811751
Author: Donald S. Tork
Length: 74 bytes
Searches a table of up to 255 entries of up to 255 byte strings for a match on the search string, which may also be up to 255 bytes long.

#811753
Author: Thomas D. Thomas
Length: 19 bytes
Adds a quadruple byte integer pointed to by [H,L] to registers [B,C,D,E].

#813751
Author: John S. Robison
Length: 277 bytes
Tests ACR interface by comparing the record line output to the input from the monitor playback output from those tape machines which have monitor capability.

#815751
Author: John Trautschold
Length: 476 bytes
Multiplies a 12-digit floating point number times an 8-digit floating point number.

#818751
Author: Jonathan Griffitts
Length: 23 bytes
Displays the contents of the accumulator in the address lights.

-- $2.00 --

#825751
Author: Richard L. Berg
Length: 34 bytes
Simple memory test. Halts when finds a bad location.

#825754
Author: Dr. Jack W. Crenshaw
Length: 16 bytes
ASCII/HEX -- HEX/ASCII conversion subroutines.

#829751
Author: R. J. Walker
Length: 57 bytes
Loads checksummed 4K or 8K Altair BASIC from an unmodified PIO board.

#92751
Author: Dean B. McDaniel
Length: 23 bytes
"Object: To kill the rotating bit. If you miss the lit bit another one at that sense switch position will turn on, now leaving you two bits to destroy."

#94751
Author: Carl Swift
Length: 15 and 11 statements
BASIC programs to dump/store memory in octal using Altair BASIC's PEEK and POKE statements.

#99751 & #99752 ($2.00 each)
Author: Gary Tack
Length: 21 and 27 bytes
Routines to add (#99752) or subtract (#99751) two 16-digit BCD numbers.

-- $3.00 --

#516751
Author: George Muttick
Length: 64 bytes
RAM Diagnostic Program. It runs "continuously until halted by a memory access error or stopped by operator. All RAM locations are written into and accessed for all 256 possible 8 bit data word combinations."

#55751
Author: Lee M. Eastburn
Length: 256 bytes
Binary to BCD conversion.
Binary number is 3 bytes long.

#62752
Author: Lee M. Eastburn
Length: 256 bytes
BCD to Binary conversion.
BCD number is 4 digits long.
Binary number is 3 bytes long.

#611751
Author: Randolph C. Wilhoit
Length: 228 bytes
This program makes a copy of a program in memory at specified locations and adjusts internal addresses in the program to correspond to the new location. There are options to make a copy of the program with no changes, to take the upper and lower limits from registers or the stack, to adjust memory references in a program without relocating it, and to adjust memory references from a group of specified instructions only.

-- $4.00 --

#523751
Author: Daniel Lovse
A series of programs that form a cross-assembler for the Altair 8800. They are written for a PDP-8 running under OS/8, and use the PAL-8 assembler.

-- $5.00 --

#818752
Author: Steve Phillips
Length: 477 bytes
Quadruple byte signed integer manipulation package. Addition, subtraction, multiplication, division as well as sign and zero value testing and other useful routines.

-- $15.00 --

#521751
Author: Jim Gerow
Length: About 30 line printer pages
This program assembles programs for the Altair 8800. It is written in ANSI standard Fortran IV. The output and input are in either octal, decimal or hexadecimal.

-- No Charge --

#731751
Author: Ward Christensen
Length: 2 bytes
Memory clear.

```
0000   063   INX SP
0001   307   RST 0
```

#813752
Author: David Nowak
Length: 4 bytes
Subroutine to do a relative jump using a displacement in [D,E]. Could be used as an RST.

```
RJMP:  XTHL   ;Get return address in
              ;[H,L]
              ;Save [H,L] on stack
       DAD D  ;Add on displacement
       XTHL   ;Save back return
              ;address and restore
              ;[H,L]
       RET    ;Do relative branch
```

#910751 -- $2.00
Author: Ross E. Housholder
Length: 22 pages
A very complete discussion of playing music on the Altair, including translation programs and an improved PLAY program with source instructions.

#911751 -- $2.00
Author: Dale J. Travis
Length: 16 bytes
Subroutine to convert binary to a 3-digit BCD number.

#912751 -- $2.00
Author: Gerhald Hansel
Length: 70 lines
A BASIC program that plays roulette.

#912752 -- $2.00
Author: Bob Omer
Length: 78 lines
BASIC program that plays the Stick game. Instructions available when the program is run.

#916751 -- $2.00
Author: Gary Tack
Length: 128 bytes
Program to play DICE with a basic Altair.

#920751 -- $2.00
Author: Dale J. Travis
Length: Approx. 80 bytes
Converts an ASCII string in decimal to a signed 16-bit number.

#920752 -- $2.00
Author: Dale J. Travis
Length: Approx. 120 bytes
Program to convert a 16-bit signed integer to an ASCII string of decimal digits.

#929751 -- $2.00
Author: Roger Walker
Length: 58 bytes
Dumps a block of memory in checksum format.

#102751 -- $2.00
Author: Robert Rydel
Length: 82 bytes
"Error Detection Code Generator/Checker." Generates cyclic redundancy check (CRC) to allow for doing error detection.

#106751 -- $2.00
Author: Gerard Bilodeau
Length: 25 bytes
A message print subroutine. Allows for embedded carriage return/line feeds and any delimeter character.

#109751 -- $2.00
Author: William D. Roch
Length: 30 lines
A BASIC program to calculate the number of days between two dates. Takes leap years into consideration.

#1010751 -- $2.00
Author: Jacques Roth
Length: 256 bytes
Program to play the "Bagels" game with a minimum Altair. Instructions included.

#1010752 -- $2.00
Author: Jacques Roth
Length: 19 bytes
Timing subroutine. Delays a specified number of seconds.

#1014751 -- $2.00
Author: Jack O. Coats, Jr.
Length: 73 bytes
Loads data from terminal into memory and executes data after the termination character. Currently written to work with a terminal connected through a parallel I/O board.

#1016751 -- $2.00
Author: Steve Caldara
Length: 21 lines
A BASIC "Lunar Lander" program.

#1016752 -- $8.00
Author: Ian D. Kettleborough
Length: 44 pages
A Fortran IV cross-assembler, currently running on a Data-General. Several listing options, as well as an object dump can be selected. Conditional assembly provided for.

#1020751 -- $2.00
Author: Gerhald Hansel
Length: 46 lines of Basic
Title: Addition problems
Produces a group of math addition problems and answers. Written to use PRINT USING, a feature of Extended Basic, to format its output.

#1020752 -- $2.00
Author: Lee Eastburn
Length: 290 locations
Title: Print program
Dumps a program with page headings, an address field and the octal contents of the address. Columns are provided to fill in labels, instruction mnemonics and comments.

#1021751 -- $2.00
Author: Jack Coats Jr.
Length: 46 bytes
Title: A Dual-Tasker
An interrupt level routine to switch between two tasks. Context is saved on the stack and the stack pointer is saved in memory.

#1027751 -- $2.00
Author: Jack Coats Jr.
Length: 43 bytes
Title: Time of Day routine
Using the real-time-clock interrupts this program keeps track of the hours, minutes, seconds and hundredths of seconds that elapse. The data is stored in binary coded decimal.

#1027752 -- $2.00
Author: Roger J. Walker
Length: 53 bytes
Title: TVTDR-I/O handler for TVT-II
TVTDR is designed to overcome a deficiency in the TVT-II that prevents it from blanking to the end of the line when a carriage return is output. The appropriate number of spaces are output instead of a carriage return. Instructions for interfacing to Altair Basic are given.

#113751 -- $2.00
Author: Jack Coats Jr.
Length: 83 bytes
Title: BCD multiplication subroutine
Currently set up to multiply two 8-digit numbers in memory and give a 16-digit number in memory for a result. Can be changed for different size numbers without much difficulty.

#1030751 -- $2.00
Author: Lee Eastburn
Length: LOAD section-71 bytes
DUMP section-96 bytes
Title: ASCII Octal Loader and Dumper
The DUMP section outputs the contents of the block of memory in ASCII octal (3 characters ["Ø" - "7"] for each byte). Twenty bytes are printed on each line of output. The LOAD section loads a tape of the same format, ignoring all characters except "Ø" through "7." The start and end locations are specified by changing LXIs in the programs themselves.

#1030752 -- $2.00
Author: John Trautschold
Length: 16 bytes
Title: VLCT load program
Allows entry of a load address and program data in octal from a VLCT keyboard. The entered data is displayed for verification. Documented with high 8-bits of start address as "XXX" so the program can easily be located at the start of any memory page (a block of 256 consecutive memory locations, the first location of which has an address divisible by 256 [decimal]).

#117751 -- $5.00
Author: S. Armstrong
Length: 124 instruction bytes (not including embedded NOPS)
342 data bytes
Title: Punch tape label
Punches paper tape labels by using 5 tape frames to make a block letter. Can "print" any alphabetic, numeric, or common delimeter. Additional characters can easily be added. "Prints" an entire line at once with separating blanks.

#117752 -- no charge
Author: Jerry Ford
Length: 318 bytes
Title: JAMON - a teletype monitor
This monitor allows examining (dumping) of memory blocks, depositing into memory blocks and jumping to a specified address. All inputs and outputs are in octal. Subroutines for character input, character output, octal input and octal output are included.

#1117751 -- $2.00
Author: George Rompot
Length: 41 bytes
Title: GET - a "Lifeline" subroutine
A well-documented subroutine to perform the functions of the TGET and LGET subroutines specified in the lifeline article in Byte magazine. (October 1975, pp. 34-41) Includes test routine.

#1117752 -- $2.00
Author: George Rompot
Length: 25 bytes
Title: CHECK
A well-documented subroutine to calculate a 16-bit sum of an area of core specified in the calling parameters. Optionally checks the computed checksum with a checksum provided in the calling sequence. A testing program is included.

#1121751 -- $2.00
Author: Gary Tack
Length: 152 bytes
Title: Random Magic Squares
Generates 3 numbers which are used to make a magic square (a 3x3 grid in which the sums of the numbers in each row, column and diagonal are equal). All "magic squares" can be generated since 3 numbers characterize a magic square. Each group of 3 numbers generates a distinct magic square. Stores magic square information in memory. Doesn't do any input/output.

#1123751 -- $15.00
Author: Jim Gerow
Length: 33 pages
Title: A FORTRAN simulator for the 8080
A FORTRAN program to take as input the code generated by Mr. Gerow's Cross Assembler (#521751) and simulate the Altair's execution of the code. Extremely useful for debugging. A manual is included with the source listing. A list of changes to be made to cross assemblers received before December 1, 1975 to allow them to work with the simulator is given.

#1124751-$2.00
Author: George Rompot
Length: 7 & 9 bytes
Title: RDEL & RHLDEL
A 16-bit left shift routine for [D, E] and a 32-bit left shift routine for [H, L, D, E].

#1124752-$2.00
Author: George Rompot
Length: 26 bytes
Title: MPY8
A subroutine to multiply [C] by [D, E], leaving the result in [H, L]. Overflow is handled by a special return sequence. The 2-byte left shift routine in #1124751 is called.

#1124753-$2.00
Author: George Rompot
Length: 44 bytes
Title: DIV 16
Divides two 16-bit unsigned integer values. Returns a 16-bit quotient and a 16-bit remainder. Uses subroutine #1124752.

#1125751-$2.00
Author: Christopher Terry
Length: 23 lines
Title: INDEL
Basic subroutine "INDEL" which inserts a fixed length digit string in, or deletes it from a string which can contain multiple digit strings. Several examples are given.

#1125752-$2.00
Author: Matthew Smith
Length: 56 bytes
Title: Random 16
Generates a 16-bit random number. All possible numbers are generated before any number repeats.

#1125753-$2.00
Author: Craig Pearce
Length: 43 bytes
Title: Number Guessing Routine
A well-documented routine that uses the front panel to play a high/low number guessing game with the user. (Good illustration of basic techniques.)

#1125759-$2.00
Author: J. Scott Williams
Length: 50 lines
Title: Basic Cassette Dumper
A very handy program that allows data on cassette to be printed out in ASCII, octal, hex, or decimal. Full instructions and examples are given.

#1201751-$15.00
Author: Lee Eastburn
Length: 309 program bytes,
1536 data bytes
Title: BLAZER
Prints 4 block letters using 64 characters across and 12 lines vertically. All printing characters are provided for, and "custom" characters can easily be added. Allows for characters to be printed and background blank, or character to be blank and background printed. The characters used in making the blocks are part of the input to the program.

#1201752-$2.00
Author: Jeffrey Clark
Length: 59 bytes
Title: Display Clock
A clock subroutine which displays either the second, minute, hour, or day in the address lights, depending on the sense switches. The initial time can be entered in locations 100-103.

#1201753-$2.00
Author: Jeffrey Clark
Length: 9-136 bytes
Title: RELJMP
Uses an RST subroutine to allow 2-byte jumps to locations within 128 bytes of the jump. Similar to M6800's "BRA", and can be used to make long programs shorter.

#1201754-$2.00
Author: Jack Coats
Length: 12 bytes
Title: Vectored Branch
A subroutine that branches back to a location 2 * [A] beyond the call.

#1201755-$2.00
Author: Gary Rupert
Length: 21 bytes
Title: Set Memory Demo
Stores the low 8 bits of each address in that address up to a specified limit.

#1203751-$15.00
Author: Jim Gerow
Length: 867 bytes
Title: 8800 Mini-Monitor
A complete monitor that provides several commands:

- Examine - prints contents of a single location
- Deposit - store into a location
- Program - give a start address and program data
- Run - start execution at a given address
- Tape - I, O, or V -- allows programs to be dumped to, input from, or verified on cassette.
- Search - scans memory for a specific value.
- Clear - zero locations between two addresses
- List - display memory contents between two locations

#1208751-$2.00
Author: Gordon Burditt
Length: 16 bytes
Title: Vectored RST
Allows up to 256 3-byte RST instructions by using a normal RST followed by an argument. Non-interruptable and impractical, since a CALL to each routine would be simpler, but very illustrative of stack techniques.

#1209751-$2.00
Author: Alan Miller
Length: 20 bytes
Title: Count in Lights
Using a modifiable delay period, this program counts in the upper eight address lights.

#1216751-$2.00
Author: Sasan Ardalan
Length: 15 bytes
Title: 8-bit BCD to Binary
A non-looping BCD to binary routine. Execution takes 42 microseconds and all registers are saved.

#1217751-$5.00
Author: Lee Eastburn
Length: 335 bytes
Title: Calendar Printer
Prints a calendar for any month. When the box for each day is typed, the user can type a single character to select one of the preset messages or a special message can be typed in. The format is 71 characters across (10 per day) and 64 lines vertically. The heading includes month name, and day name for each column.

#1217552-$5.00
Author: Walter King
Length: 384 bytes
Title: Micro-operating System
An extremely handy operating system that allows saving and loading from cassette, dumping of memory locations, running of programs; and provides subroutines for character input, character output, string output, cassette input, and cassette output. Functions such as program loading can be done with program calls.

#1223751-$2.00
Author: Frederick Dingwall
Length: 48 bytes
Title: 8-bit Octal Input
Inputs 3 ASCII characters which are converted to an 8-bit number which is stored in memory. Allows contents of consecutive locations to be stored in order of input.

#1223752-$2.00
Author: Frederick Dingwall
Length: 48 bytes
Title: 8-bit Hexadecimal Input
Same as #1223751, except numbers are input as 2-character hexadecimal constants.

#1229752-$2.00
Author: Matthew Smith
Length: 59 bytes
Title: Ping Pong
Game program in which players flip switches to control the "ping pong ball" (lit bit).

#1-5-761--$2.00
Author: Adolph P. Stumpf
Length: 247 bytes
Title: LIFE
Plays the game LIFE on a TVT-2, but can be modified to run on other terminals.

#1-8-761--$2.00
Author: J. W. McCarty
Length: 32 bytes
Title: String Table Search
Uses a search tree to match a string against a table of reserved words.

#1-14-761--$2.00
Author: Mark Prinsen
Length: 324 lines (BASIC)
Title: Stock Market Simulation
Allows up to 10 players to play a simulated stock market. Slight changes are necessary to run in ALTAIR BASIC.

#1-15-761--$2.00
Author: Don Baechtel
Length: 84 bytes
Title: TAPELOAD
Loads an ASCII octal paper tape into memory.

#1-15-762--$2.00
Author: Don Baechtel
Length: 28 bytes
Title: DIV
Divides an 8 bit unsigned binary number by an 8 bit unsigned binary number.

#1-15-763--$2.00
Author: Don Baechtel
Length: 157 bytes
Title: CDUMP
"Core" dump program which dumps memory in octal and in equivalent ASCII characters.

#1-15-764--$2.00
Author: Don Baechtel
Length: 13 bytes
Title: MULT
8 bit times 8 bit unsigned binary multiply.

#1-15-765--$2.00
Author: Don Baechtel
Length: 57 bytes
Title: MBSHIFT
Shifts up to 64K bytes, up to 256 places left or right with zero fill into the empty positions.

#1-15-766--$2.00
Author: Don Baechtel
Length: 33 bytes
Title: APTLOAD
Absolute boot loader.

#1-20-761--$2.00
Author: Erik T. Mueller
Length: 206 bytes
Title: Number Guessing Game
User must try to guess a number between 0 and 255. Assumes a TVT-II is the terminal.

#1-21-761--$5.00
Authors: John Arnold and Dick Whipple
Length: Approximately 500 bytes
Title: ASCII Monitor/Editor
Following commands are included:
DOP-Dump Octal
LDO-Load Octal
EDT-Change memory
SBP-Set Break Point
CBP-Clear Break Point
XQT-Execute
RDC-Read Data from Cassette
WDC-Write Data to Cassette
RUN-Start User Program
CPY-Block memory move
MSG-send characters to output device

#1-22-761--$2.00
Author: William A. Ruggirello
Length: 106 bytes
Title: 16 Bit Divide
Divides a 16 bit unsigned binary number and rounds up the 16 bit result.

#1-23-761--$2.00
Author: Harold A. Corbin
Length: 310 bytes
Title: Paper tape Editor
This editor allows corrections to be made to a line as it is typed in, and automatically adjust input fields on each line to satisfy the input field requirements for a multi pass 8080 assembler.

#1-28-761--$2.00
Author: Martin H. Eastburn
Length: 48 bytes
Title: Memory Test
Simple memory test by another member of that prolific group of programmers, the Eastburn family.

#2-2-761--$2.00
Author: M. A. Enkelis
Length: 19 lines (BASIC)
Title: Julian Calendar

#2-2-762--$2.00
Author: M. A. Enkelis
Length: 76 lines (BASIC)
Title: LUNAR LANDER
Game to simulate landing of lunar module on the moon.

#2-2-763--$2.00
Author: M. A. Enkelis
Length: 7 lines (BASIC)
Title: Pseudo Random Number Generator
Generates a 16 bit pseudo random intiger.

#2-2-764--$2.00
Author: M. A. Enkelis
Length: 20 bytes
Title: 16-bit Delay
This subroutine loops for a number of seconds, minutes and hours--up to 12 hours.

#2-3-761--$15.00
Author: L. M. Eastburn
Length: 2125 bytes
Title: BIOPLOT
Huge machine language program which plots graphically on a teletype or other terminal a person's 23 day physical & 28 day sensitivity and 33 day cognitive biorhythm cycles.

#2-5-761--$2.00
Author: George W. Rompot
Length: 49 bytes
Title: ASCII Keyboard Load
Loads Octal data through a keyboard into memory.

#2-12-761--$2.00
Author: Sidney Rosell
Length: 45 bytes
Title: Memory Test and Clear Routine
Simple memory test. Can also be used to clear memory.

#2-13-761--$2.00
Author: Roger Walker
Length: 238 bytes
Title: OCTAL MINI-MONITOR

#2-18-761--$2.00
Author: Jack O. Coats, Jr.
Length: 53 bytes
Title: 5BCDBIN
Converts a 5-digit BCD number in memory to a 16-bit integer value.

#2-18-762--$2.00
Author: R. H. Hann
Length: 126 lines (BASIC)
Title: Tic-tac-toe
This "heuristic" (learning) program plays tic-tac-toe.

#2-18-763--$5.00
Author: L. M. Eastburn
Length: 319 bytes
Title: TTY utility
This is a general purpose program to use a TTY and VLCT. One can have the program type a variety of repetitive remarks like Xmas greetings. It provides routines that will backspace and execute TAB functions on a TTY.

#2-20-761--$2.00
Author: Joe W. McCarty
Length: 223 bytes
Title: FIFO
General purpose routines to implement any number at stacks, to check when stacks are full, PUSH and POP entries on stacks, etc.

#2-20-762--$2.00
Author: Jack O. Coats, Jr.
Length: 15 bytes
Title: Computer GO TO
Branches to the nth address following the subroutine call. Destroys PSW, A, H, & L.

#2-23-761--$2.00
Author: Bill Thompson
Length: Approximately 250 lines (BASIC)
Title: Astronomical OPTICS
Computer ray trace. Needs about 12K with 8K BASIC.

#2-24-761--$2.00
Author: Robert Riskin
Length: 12 lines
Title: FRETS
This program calculates and prints the distances of any number of frets from either the neck or bridge of a musical instrument of any scale length, rounded to two places.

#2-26-761--$2.00
Author: Martin H. Eastburn
Length: 56 bytes
Title: Distribution Analysis
This program sorts through a string of bytes while keeping track of the quantity of each possible number encountered.

#2-26-762--$2.00
Author: Jerry A. Ford
Length: 28/33 bytes
Title: TDUMP/TLOAD
Memory dump/load routines to use with JAMON.

#2-26-763--$2.00
Author: Jerry A. Ford
Length: 121 bytes
Title: JABUG
Simple breakpoint routine which types out registers.

#2-27-761--$2.00
Author: Harold Corbin
Length: 46 lines (ALTAIR BASIC)
Title: XYPLOT
Produces an X-Y plot of a single valued function.

#3-1-761--$2.00
Author: Amos D. Conard
Length: 21 lines (ALTAIR BASIC)
Title: NUMGUESS
Simple number guessing game.

#3-1-762--$2.00
Author: Robin Myers
Length: 73 bytes
Title: BRIDGET
Plays game of BRIDGET. No I/O device needed.

#3-1-763--$2.00
Author: Roger Walker
Length: 83 bytes
Title: CDUMP
General purpose routine to dump memory in MITS binary checksummed format.

#3-1-764--$2.00
Author: Harold Corbin
Length: 60 lines (ALTAIR BASIC)
Title: BIORYTHM
Produces biorythm plots.

#3-1-765--$2.00
Author: Harold Corbin
Length: 26 lines (ALTAIR BASIC)
Title: LIFE
Plays popular LIFE game.

#3-2-761--$2.00
Author: Alan R. Miller
Length: 122 bytes
Title: HEXMON
Allows JAMON (#117752) to accept and output information in hex for the L, D, or G commands.

#3-3-761--$2.00
Author: Henry E. Lacy
Length: 75 bytes
Title: Security Access Routine
Subroutine for use with JAMON which verifies a 5-character password before allowing the user access to the system.

#3-4-761--$2.00
Author: Ian Kettleborough
Length: 201 bytes
Title: Binary Loader
Modified version of MITS checksum loader which will automatically relocate itself to any area of memory.

#3-9-761--$2.00
Author: Alan R. Miller
Length: 63 bytes
Title: Memory Check
Memory test for use with JAMON. Count test (writes 0-377 octal in every byte in memory).

#3-9-762--$2.00
Author: Alan R. Miller
Length: 19 bytes
Title: Memory Preset
Sets a block of memory to a predefined value.

#3-9-763--$2.00
Author: John E. Budnick
Length: About 350 bytes
Title: MASTERMIND
Game where player attempts to break a code devised by other player (Altair). Needs a terminal.

#3-12-761--$2.00
Author: R. H. Hann
Length: 152 lines (BASIC)
Title: STAR TREK
Plays a game based on popular TV show.

#3-12-762--$2.00
Author: R. H. Hann
Length: 95 lines BASIC
Title: TIC-TAC-TOE
Plays tic-tac-toe.

#3-12-763--$2.00
Author: Christopher J. Flynn
Length: About 100 bytes
Title: ASCII ACR I/O routines
Modifications to MITS ALTAIR BASIC which allow programs to be saved on cassette in source (ASCII) form.

#3-15-761--$2.00
Author: David D. Welter
Length: 726 lines (IBM 360 Assembler)
Title: ASM8080
Cross-assembler for the Altair 8800 written in MACROs in system 360 assembly language.

#3-16-761--$2.00
Author: Joe Konard
Length: 72 lines (ALTAIR BASIC)
Title: PAPER TAPE
This well written program punches paper tape labels in human readable format.

#3-16-762--$2.00
Author: Erik T. Mueller
Length: 129 bytes
Title: Rocket
Plays "lunar lander program" on a TVT-II.

#3-16-763--$2.00
Author: Erik T. Mueller
Length: 182 bytes
Title: ESMO
Very compact monitor. Has commands for entering and dumping memory locations in octal, and for starting program execution at a specified location.

#3-19-761 - $2.00
Author: Don Baechtel
Length: 61 bytes
Title: REG DEC
Decimal print routine, outputs [H,L] registers.

#3-22-761 - $2.00
Author: Alan R. Miller
Length: 512 bytes
Title: PROMON
PROM version of JAMON which assumes a 2SIO interface board and an ACR board as I/O devices. 12K, 8K, and 4K cassette boot loaders are also available on the PROM.

#3-24-761 - $2.00
Author: Martin H. Eastburn
Length: 47 bytes
Title: Numerical Order Sorter Machine Language.

#3-24-762 - $2.00

Author: William O. Fisher
Length: 120 lines (Altair BASIC)
Title: Gregorian Calendar Program
Allows the user to print out a calendar, find the day of the week of a given date, etc.

#3-31-761 - $2.00
Author: Alan R. Miller
Length: 70 bytes
Title: RELOCATE
Changes address of JMPs and CALLs to relocate an assembly language program in memory.

#4-1-761 - $2.00
Author: Jim Gerow
Length: 92 lines (Altair BASIC)
Title: MATINV
Uses Gaussian elimination with pivoting to invert a matrix.

#4-1-762 - $2.00
Author: Joe W. McCarty
Length: About 100 bytes
Title: 1POP, 2POP, 1PUSH, 2PUSH
Routines to POP and PUSH entries deep on the stack passed as parameters to a subroutine.

#4-6-761 - $2.00
Author: Walter S. King
Length: 34 bytes
Title: IPL
Boot loader suited for a diode matrix or PROM.

#4-9-761 - $2.00
Author: Alan R. Miller
Length: 56 bytes
Title: TAPECHK
Compares tape dump of memory against memory that was dumped.

#4-9-762 - $2.00
Author: Paul Braddock
Length: 200 bytes
Title: MUSIC
Music program. Allows entry of notes of a song through the sense switches, and subsequent playing of the song on the Altair. Modified version of Steve Dompier's program.

#4-14-761 - $2.00
Author: Rich Schaal
Length: 92 lines (Altair BASIC)
Title: BASIC Program Resequencer
This program reads a program CSAVEd on cassette into memory and then re-sequences it. (Changes the line numbers and line references.)

#4-15-761 - $2.00
Author: Gerhald Hansel
Length: 42 lines (IBM BASIC)
Title: LOG 10
Prints a table of Base 10 logarithms.

#4-15-762 - $2.00
Authors: Marc Montemorra & Glenn Sherman
Length: About 230 lines (BASIC)
Title: CATCH
Plays a game where you chase the computer inside a two-dimensional (5x5) matrix.

#4-15-763 - $2.00
Authors: Marc Montemorra & Glenn Sherman
Length: 88 lines (BASIC)
Title: DAZE
This program calculates the number of days between two calendar dates.

#4-19-761 - $2.00
Author: Lynn Cochran
Length: 143 lines (Altair BASIC)
Title: STARTREK
Well-written BASIC program for game based on popular TV show. Needs 12K total of memory with 8K BASIC.

#4-27-761 - $2.00
Author: Gerald Hansel
Length: 66 bytes
Title: Trig Table (BASIC)
Prints a trig table of sine, cosine and tangent functions for selected angles.

#4-27-762 - $2.00
Author: Ron Santore
Length: Slightly greater than 1K bytes
Title: Button
Plays "guess who has the button" game on an ASCII terminal.

#4-27-763 - $2.00
Author: Gerald Hansel
Length: 60 lines (BASIC)
Title: Roulette
Plays roulette against house by using doubling strategy.

#4-27-764 - $2.00
Author: Walter King
Length: 75 bytes
Title: ACR Diagnostic
Thorough routines for checkout and alignment of ACR board with extensive error reporting.

#4-27-765 - $2.00
Author: Erik Mueller
Length: 256 bytes
Title: Horse Race
Five horses race across screen of TVT.

#4-27-766 - $2.00
Author: George Rompot
Length: 64 bytes
Title: INTD
Breakpoint routine to use in conjunction with JAMON to display registers and stack pointer. RST 0 is used to set breakpoints.

#4-27-767 - $2.00
Author: David W. Dodge
Length: About 300 lines (BASIC)
Title: LCM
Computer Assisted Instruction (CAI) program teaches how to add fractions with different denominators.

#5-3-761 - $2.00
Author: James Erlach
Length: 36 lines (Altair BASIC)
Title: REACTION
Tests your reaction time by timing how long it takes you to hit a terminal key after the computer rings a bell.

#5-3-762 - $2.00
Author: Mitchell Wolrich
Length: 107 lines BASIC
Title: Missle Plane
Game in which one player flies a plane and the other player tries to shoot him down with a missle.

#5-3-763 - $2.00
Author: Mitchell Wolrich
Length: 140 lines (BAIC)
Title: YUM
Plays Yahtze game. All instructions and prompts are in French.

#5-3-764 - $2.00
Author: George Rompot
Length: 197 bytes
Title: TARGET
Plays a game where missles are shot at a moving target. Score is kept on the screen of VDM-1.

#5-4-761 - $2.00
Author: Bill Thompson
Length: 304 lines (HP BASIC)
Title: Least Squares
Performs least squares of six different curves to a set of data points.

#5-4-762 - $2.00
Author: Bill Thompson
Length: 141 lines (HP BASIC)
Title: Polar Plotting
Calculates and plots a function on a polar graph.

#5-4-763 - $2.00
Author: Bill Thompson
Length: 375 lines (HP BASIC)
Title: Multiple Linear Regression
Program performs multiple linear regression analysis for one independent variable and up to six independent transforms.

#5-6-761 - $2.00
Author: Craig Pearce
Length: 43 lines (Altair BASIC)
Title: BAGELS
Plays familiar 3-digit number guessing game.

#5-6-762 - $2.00
Author: Craig Pearce
Length: 19 lines (Altair BASIC)
Title: Number Predictor
Number guessing game. Exceptionally well documented.

#5-6-763 - $2.00
Author: Craig Pearce
Length: 24 lines (Altair BASIC)
Title: Day of the Week
Calculates day of the week for any date later than September 14, 1752.

#5-14-761 - $2.00
Author: Paul Krystosek
Length: 196 bytes
Title: Morse Code Sending from Keyboard

#5-14-762 - $2.00
Author: George Rompot
Length: 23 bytes
Title: Screen Fill
Moves strings of text to VDM-1 display buffer.

#5-14-763 - $2.00
Author: George Rompot
Length: 335 bytes
Title: Shooting Stars
Plays "Shooting Stars" game found in May 1976 issue of Byte magazine. VDM-1 required for display.

#5-24-763 - $15.00
Author: Jim Gerow
Length: 1800 lines
Title: 6800 Cross Assembler
Written in FORTRAN.

#5-17-761--$2.00
Author: Alan Miller
Length: 24 lines BASIC
Title: SOLVIT
Subroutine for curve fitting and solution of simultaneous equations.

#5-20-761--$2.00
Author: Bill Thompson
Length: 168 lines BASIC
Title: Annuity Calculations
Interesting program for interest calculations.

#5-20-762--$2.00
Author: Bill Thompson
Length: 224 lines BASIC
Title: Annuity Calculations #2
Same as #5-20-761 except uses WRITE and FORMAT (HP BASIC) instead of PRINT USING.

#5-20-763--$2.00
Author: Bill Thompson
Length: 48 lines BASIC
Title: Savings
Calculates the total yield of an investment.

#5-20-764--$2.00
Author: Bill Thompson
Length: 47 lines BASIC
Title: True Annual Interest
Calculates the true annual interest rate charges on an installment loan.

#5-20-765--$2.00
Author: Bill Thompson
Length: 103 lines
Title: Cash Flow and Discounted Rate of Return
Calculates cash flow and discounted rate of return.

#5-20-766--$2.00
Author: Bill Thompson
Length: 212 lines
Title: Polynomial Curve Fit
Calculates polynomial fit using least-squares approximation method.

#5-21-761--$5.00
Author: John Trautschold
Length: 1K bytes
Title: VLCT Octal Monitor
System monitor for use with VLCT.

#5-24-761--$2.00
Author: Joe Konrad
Lenght: 79 lines BASIC
Title: Radio Code
Produces Morse radio code. Includes a schematic for a tone oscillator to be used by the program.

#5-24-762--$2.00
Author: Walter King
Length: 50 bytes
Title: Baudot 5-Level Tape Loader
Loads object code from 5-level paper tape.

#5-24-765--$2.00
Author: Walter King
Length: 71 bytes
Title: Baudot 5-Level Tape Dumper
Punches 5-level object tapes which can be read by #5-24-762.

#5-25-761--$2.00
Author: Robert Wilcox
Length: 35 lines BASIC
Title: Punch Tape Label Program
Punches human-readable labels on ASR33 paper tape.

#5-25-762--$2.00
Author: Robert Wilcox
Length: 40 lines BASIC
Title: Punch Tape Label Program #2
Fancy version of #5-25-761. Punches leader, label, and more leader.

#5-27-761--$2.00
Author: George Rompot
Length: 180 bytes
Title: JAMON Mods-Hex Input & Output
Adds hexadecimal input and output to JAMON while retaining present octal capabilities.

#6-1-761--$2.00
Author: Dale Travis
Length: 32 lines BASIC
Title: Lister
Reads paper tapes and produces a page formatted listing.

#6-1-762--$2.00
Author: Dale Travis
Length: 103 lines BASIC
Title: Square
Plays the game of Square.

#6-1-763--$2.00
Author: Dale Travis
Length: 97 lines BASIC
Title: Kingdom
Plays the game of Kingdom.

#6-1-764--$2.00
Author: Dale Travis
Length: 159 lines BASIC
Title: Dodgem
Plays the game of Dodgem.

#6-2-761--$5.00
Author: Alan Miller
Length: 1K bytes
Title: PROM on 1K
System Monitor for 1K of PROM or RAM.
An extension of #3-22-761.

#6-3-761--$2.00
Author: Alan Miller
Length: 40 lines BASIC
Title: P PLOT
Produces dual printer plots.

#6-7-761--$2.00
Author: Herb Archer
Length: 128 Bytes
Title: Pong
Players paddle a bit across the front panel LEDs.

#6-11-761--$2.00
Author: Roger Frank
Length: 10 Lines BASIC
Title: Tape ID
Determines and prints the CSAVE character for CSAVEd files.

#6-14-761--$2.00
Author: Roy Hann and Alan Menezes
Length: 146 lines BASIC
Title: Lunar Landing Game
Plays an extended version of Lunar Lander.

#6-14-762--$2.00
Author: Jim Salem
Length: 55 bytes
Title: Keyload
A simple ASCII-to-octal keyboard loader.

#6-16-761--$2.00
Author: Martin Eastburn
Length: 32 bytes
Title: Super Time Counter
Generates program time delays with accuracy to ±1 sec/min.

#6-18-761 - $2.00
Author: James B. Hansen
Length: 215 bytes
Title: ASCII to Baudot Translate Routine

#6-22-761 - $2.00
Author: Jim Wiggins
Length: 106 Bytes
186 Bytes
Title: Tape Load-Octal TLQ
Tape Dump-Octal TDQ
for Baudot Teletypes

#6-25-761 - $2.00
Author: Alan R. Miller
Length: 12 Lines BASIC
Title: "ERF"
Evaluates the error function.

#6-25-762 - $2.00
Author: Alan R. Miller
Length: 4 Lines BASIC
Title: GAMMA
Evaluates the Gamma Function.

#6-28-761 - $2.00
Author: Jim Salem
Length: 71 bytes
Title: Guess 1
Random number guessing game.

#6-28-762 - $2.00
Author: Jim Salem
Length: 88 bytes
Title: Guess 2
Random number guessing game.

#6-29-761 - $2.00
Author: Alan R. Miller
Length: 7 lines BASIC
Title: "DROOT" Double
Precision square root.

#7-6-761 - $2.00
Author: Alan R. Miller
Length: 9 lines BASIC
Title: BASIC Subroutine Newton
Newton's method for finding solution
to 8(x) = 0.

#7-7-761 - $2.00
Author: Jim Blackstone
Length: 635 bytes (hex notation)
Title: 8080 Debug Package
Access and modify memory
Copy memory from one block to
another
Dump memory to Teletype printer
Fill memory block
Go To program
Print registers and flags.

#7-8-761 - $15.00,paper tape - $15.00
Author: Jim Gerow
Length: 300 Lines BASIC
Title: 8800 Assembler
Altair 8800 Assembler written in
Altair BASIC.

#7-12-761 - $15.00
Author: Peter Smart
Length: 1700 Lines (Fortran)
Title: 6800 cross assembler
Altair 680 cross assembler written in CDC Cyber 74 Fortran

#7-12-762 - $2.00
Author: Peter Graulich
Length: 225 Lines (BASIC)
Title: Bio-rhythms
Plots Bio-rhythm cycles

#7-13-761 - $2.00
Author: Harold Corbin
Length: 90 lines (BASIC)
Title: Depreciation
Program to compute depreciation by 4 methods.

#7-14-761 - $2.00
Author: Roy Hann
Length: 15 lines (Fortran)
Titles: Finds value for Pi
Finds a value for PI by Wallis' formula.

#7-14-762 - $2.00
Author: Roy Hann
Length: 200 lines (ICL 1900 Fortran)
Title: Least-square curve-fitting program fits a curve to a set of experimental points by using least square method.

#7-19-761 $2.00
Author: Charles Wells
Length: 300 bytes (total) (assembler)
Title: Baudot Printer Program
A patch and some additions to 3.2 Basic to allow it to use a Baudot Printer.

#7-19-762 - no charge
Author: Matthew Smith
Length: 12 Lines (Basic)
Title: Bases
Base conversion subroutine

#7-20-761 - $2.00
Author: Jeb Long
Length: 500 Bytes (assembler)
Title: Intelligent terminal
Interfaces an Altair 8800 to a time sharing computer

#7-22-761 - $2.00
Author: J.W. Klotz
Length: 350 lines (5980 bytes) (BASIC)
Title: Math drill
CAI Program for teaching elementary math.

#7-22-762 - $2.00
Author: Keith Fischer
Length: 65 lines (disk extended basic)
Title: Reseq +
Resequences Basic programs on disk files.

#7-22-763 - $2.00
Author: George W. Rompot
Length: 150 Bytes (Machine Language)
Title: Creed
Creed 75 output driver for use with JAMON.

#7-26-761 - $2.00
Author: Tom Simpson
Length: 170 Lines (Basic)
Title: TTT 3D
Plays the game of 3D tic tac toe

#7-28-761 - $2.00
Author: Phillip L. Hansford
Length: 25 Bytes + table (Assembler)
Title: Jam Table
An efficient command table lookup change to the JAMON monitor (#117752)

#7-29-761 - $2.00
Author: David Vomlehn
Length: 10 bytes (Assembler)
Title: Complete memory clear.
A short memory clearing program that clears entire memory, including itself.

#7-29-762 - $5.00
Author: Darrel J. Van Buer
Length: 749 + 184 (Max) bytes (assembler)
Title: Interrupt driven multi-processing.
Multi-tasking system driven by interrupts from a 2 SIO board.

#8-9-761 - $2.00
Author: Alan Miller
Length: 200 Lines Altair BASIC
Title: QUBIC
Plays 3D tic-tac-toe.

#8-10-761 - $2.00
Author: Alan Miller
Length: 7 lines Altair BASIC
Title: Numerical Integration
Numerical integration by Simpson's method and Trapezoidal Rule.

#8-13-761 - $2.00
Author: Erik Mueller
Length: 7,000 (octal) bytes
Title: MINOL
Interpreter for a 4K subset of BASIC.

#8-16-761 - $2.00
Author: Roger Frank
Length: 7 lines Altair BASIC
Title: Memory Size
This program resets BASIC memory sizes without restarting (for 3-2 only).

#8-19-761 - $2.00
Author: Alan Miller
Length: 5 lines Altair BASIC
Title: ARCSIN
Program to compute arcsin and arccos.

#8-23-761 - $2.00
Author: Keith Fischer
Length: 150 lines Altair BASIC
Title: BECO
Powerful Text Editor.

#8-26-761 - $2.00
Author: Roger Frank
Lenght: 22 lines Altair BASIC
Title: Memory Test
Program to test unused memory.

#8-27-761 - $2.00
Author: John Stanton
Length: 52 bytes
Title: 4PIO KBD/PTR Loader
Loads data into memory from keyboard and echoes it.

#8-28-761 - $2.00
Author: J. David Green
Length: 168 lines Altair BASIC
Title: Horse Racing
A horse racing game that involves betting on the races.

#9-1-761 - $15.00
Author: Kenneth Aird
Length: 41,000 bytes FORTRAN
Title: M6800 Cross Assembler
Very well written FORTRAN Cross Assembler for M6800.

#9-8-761 - $2.00
Author: Alan R. Miller
Length: 50 lines Altair BASIC
Title: Teaser

Matrix number guessing game.

#9-10-761 - $2.00
Author: N. Craig Brown
Length: 20 lines Altair BASIC
Title: Christmas Tree

Program to print christmas tree.

#9-17-761 - $2.00
Author: Robert Wilcox
Length: 16 lines Altair BASIC, 70 bytes assembler
Title: Basic Terminal Change

Program to allow version 3.2 of BASIC without Console command to switch to alternate console.

#9-27-761 - $2.00
Author: John Robison
Length: 265 bytes assembler
Title: Keyboard Entry/Display

Interrupt driven storage display/ modification program.

#10-4-761 - $2.00
Author: Philip Romanik
Length: 20 lines HP BASIC
Title: Printer Subroutine

Program to break strings at word boundaries.

#10-12-761 $2.00
Author: Darrel Van Buer
Length: 16 lines Altair BASIC
Title: Inverse Normal Distribution Function

#10-15-761 $2.00

Author: Henry E. Lacy
Length: 153 bytes/136 bytes
Title: Decimal Support Package (requires #8-18-752)/ Decimal Output Routine

#10-18-761 $2.00
Author: Jay Lucas
Length: 100 bytes
Title: Memory Test
Assembler memory test, a very thorough one.

#10-19-761 $2.00
Author: Lee Wilkinson
Length: 60 lines Altair Basic
Title: Accounts Receivable

#10-21-761 $2.00
Author: Philip Romanik
Length: 30 lines HP BASIC
Title: Random
Random Number Generator

#10-21-762 $2.00
Author: Henry E. Lacy
Length: 74 bytes
Title: Self-incrementing Hand Loader

#10-25-761 $2.00

Author: Byron Johnson
Length: 2 lines BASIC
Title: Extended Precision Square Roots.

#10-25-761 $2.00
Author: Byron Johnson
Length: 7 lines BASIC
Title: BASIC Line Renumbering
Renumbering program for 3.2 Extended BASIC.

#10-27-761 $2.00
Author: Steven Armbruster
Length: 210 bytes 680 Assembler
Title: Political Influence

#11-4-761 $2.00
Author: Gordon Berry
Length: 32 lines Altair BASIC
Title: Standardized and Weighted Scores

#11-4-762 $2.00
Author: Gordon Berry
Length: 300 bytes
Title: Print Registers